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Policy Practices and Options in Knowledge Intensive Business Services

WP8 Intermediate Report for the EURODITE WP8 policy cloud meeting in Brussels 23-24 September 2009

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Publication date:
2009

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Smed, K. M., & Halkier, H. (2009). *Policy Practices and Options in Knowledge Intensive Business Services: WP8 Intermediate Report for the EURODITE WP8 policy cloud meeting in Brussels 23-24 September 2009*. Institut for Historie, Internationale Studier og Samfundsforhold, Aalborg Universitet.

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WP8 Intermediate Report: Policy Practices and Options in Knowledge Intensive Business Services

1. Introduction

The aim of this paper is to describe and analyse KIBS related policies based on four parameters, as the *Outline and template for analysis* prescribes: policy contexts, current policies, policies and knowledge dynamics, and policy scoping. These parameters are based on the tools provided in the outline as well as some central *EURODITE* reports, i.e. primarily the WP3 KIBS report and the KIBS cases described in WP5 and WP6. Other *EURODITE* reports have also been included when relevant. The regional case studies involved in this report entail the cases of Baden-Württemberg/Germany, North Jutland/Denmark, Western Switzerland, and Bratislava/Slovakia.

2. Policy contexts

Knowledge-intensive business services (KIBS) play an important role in assisting their clients' performances in knowledge based economies by carrying, producing and mediating knowledge for the purpose of converting it into economic gain for their clients. Knowledge is the non-material, intangible product that these businesses sell, and as such KIBS represent knowledge processing and production for the benefit of the knowledge dynamics within the various sectors that KIBS clients represent, i.e. they can become drivers of knowledge dynamics in different sectoral contexts. The KIBS sector is thus characterised by a dynamic relationship with other sectors and consequently it also depends on the contexts of these sectors.

A narrow definition of the KIBS sector has been proposed (WP3 KIBS, p.6) which addresses the cross-sectoral dimension of the services provided by KIBS. These services entail computer services, research and development, economic services, technical services and advertising, and country specific levels of involvement as well as specializations within these services are evident (WP3 KIBS, p.9). KIBS thus constitute a heterogeneous segment of services, and the KIBS sector is also heterogeneous in itself in the sense that private firms, in-house departments, and public organisations are possible organisations of KIBS businesses. In addition, the distribution of KIBS

services (WP3 KIBS, p.14) across the differentiation of knowledge proposed by Cooke (2006) suggests that synthetic (engineering and social science) and symbolic (arts and communicative) knowledge have stronger representation than analytical (natural science) knowledge in KIBS sub-sectors (knowledge types based on definition by Halkier, WP1c p.8). The focus, however, of the WP3 KIBS report is on “*firms which provide knowledge-intensive business services in the market place as their main product*” (WP3 KIBS, p.11), and this is also the focus of the current report.

A characteristic feature of KIBS is the fact that clients are actively involved in the production process, which is said to set this sector apart from manufacturing (see WP3 KIBS, p.4 – tourism is another sector in which customers are an integrated part of service production). This feature of interaction, the mentioned fact that knowledge is the good KIBS are selling, along with a process of problem solving adapted to the client’s needs, are characteristics that define KIBS as a sector (WP3 KIBS, p.12). This means that KIBS are at the same time involved in a process of specialisation in the sense that they assist clients with specific tasks in this process and involved in a process of transfer of knowledge because KIBS operate on the accumulated knowledge from interactions with different clients, and thus contribute to knowledge dynamics in two intimately connected ways.

KIBS’ contributions are thus characterised by processes of knowledge contextualisation in which client contexts are considered for relevant and applicable knowledge to emerge, de-contextualisation is used to transfer knowledge onto other contexts in which it may be directly or indirectly applied, and re-contextualisation diffuses implicit knowledge to other contexts (WP3 KIBS, pp.25). Therefore, the critical resources for KIBS are related to contextual knowledge at various levels. In order to supply clients with the required knowledge, it is crucial that KIBS both have an understanding of the organisational context in which their clients operate, and know how to transfer their own accumulated knowledge to a specific context. At the same time, specialised practical or theoretical knowledge within the sector at hand is also necessary, as is a precondition for knowledge production within the specific context of the client. This means that a combination of these resources, i.e. organisational knowledge on the one hand and specialised practical or theoretical knowledge on the other, forms the platform that needs to be present in order for new knowledge to emerge in the interaction between user and producer that characterises KIBS businesses, as illustrated by Figure 2.1 below.

KIBS knowledge at the centre thus entails general theoretical knowledge and knowledge accumulated from a variety of sectors with which KIBS have interacted and which functions both as the basis for new contextualisations and as a source of knowledge that emerges in the interaction

between KIBS and the sectors with which they interact. As illustrated by Figure 2.1 (where the *EURODITE* KIBS case study sectors are highlighted), this interaction becomes a critical knowledge domain that needs to be considered in light of the specific sectoral contexts.

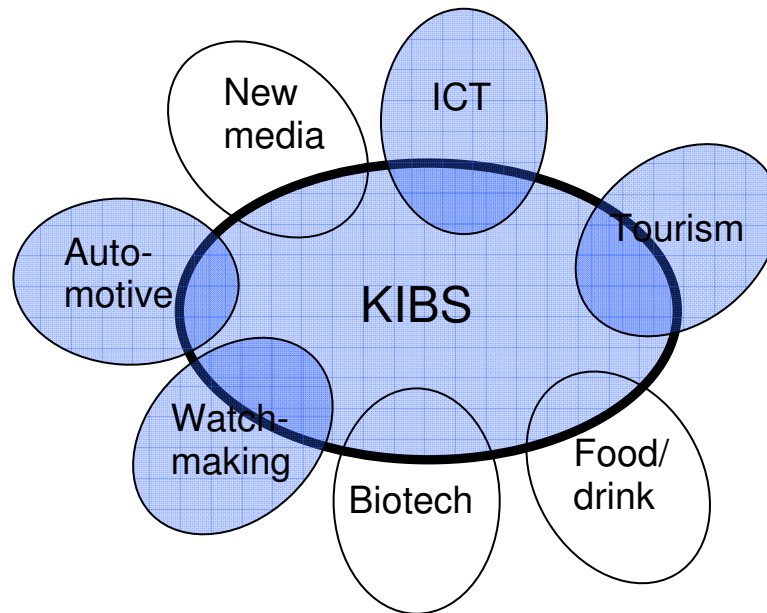


Figure 2.1. Critical resources and forms of knowledge.

The KIBS case studies undertaken by *EURODITE* partners include the region of Baden-Württemberg/Germany categorised as a German high tech industrial profile (WP 4 categorisation, p.43), and in this particular case, KIBS is the primary sector of investigation while several other ‘client’ sectors are touched upon in less detail. Regarding the KIBS sector in Baden-Württemberg, it is assumed that in-house KIBS have dominated the region’s heavy manufacturing industries in the past where KIBS have existed often without appearing in official statistics. However, as outsourcing seems to be gaining grounds, KIBS have emerged as an important sector specialization within the region (WP6 Marburg, p.4-5).

Three additional case studies have been undertaken in which KIBS is a secondary sector of investigation, and the regions in focus are: North Jutland/Denmark, a north scientific region (WP4 regional typologies, p.41); Western Switzerland, also a north scientific region (WP6 Neuchâtel, p.10); and Bratislava/Slovakia, included in the Italian textile profile (WP6 Bratislava, p.3). The fact that these three case studies have KIBS as a secondary object of study results in direct connections to the primary sectors under investigation, because KIBS have been added in relation to these sectors and not the other way around. The primary sectors are tourism, in the case of North Jutland,

watch-making in the case of Western Switzerland, and ICT in the case of Bratislava, and thereby KIBS are affected by policies related to the sectors with which they interact, i.e. the policies of the sectors involved spill over into the overlap between KIBS and a given sector in figure 2.1, in which common ground is established. The case studies providing input for this report offer varying levels of detail on KIBS in these regions, and the KIBS sector portrayed here therefore implies varying degrees of intensity and importance in the different regions, with the Baden-Württemberg case apparently being situated in the most KIBS-intensive locality.

3. Current KIBS and related sector policies

The KIBS case studies reported in the WP5 and WP6 reports present policies that are targeting non-KIBS rather than primarily KIBS. Considering the importance of context pointed out above, this is not surprising, since KIBS operate in various sectoral contexts, which include specific policies, and it thus seems logical that other sector policies have great impact on KIBS as well. Therefore, Table 3.1, summarising current KIBS policies, have been organised according to the policies' relation to the relevant sectors, i.e. a direct relation to KIBS, an indirect relation to KIBS through targeting of other case study sectors (tourism, ICT, watch-making, automotive), or a cross-sectoral/regional relation which indicate more general strategies and policy aims for a sector or region.

Table 3.1. Current policies for KIBS and related sectors		
<i>Direct (KIBS)</i>	<i>Cross-sectoral/regional initiatives¹</i>	<i>Indirect (Sector-specific to Tourism, ICT, Watch-making, Automotive)</i>
		T-1: Development of an all-year tourism destinations strategy T-2: Forming networks between private and public actors (at various levels) to enhance competitiveness
	CS-1: Development policy of the Bratislava region, supporting IT infrastructure development, support of IT in education and public administration, establishment of public-private research networks and regional innovation capacity	I-1: Establishment of specialised national institutions such as National Security Office or Office for Protection of Personal Data leading to a number of legal acts + national strategy for information security I-2: Guidelines issued by the European Commission or OECD I-3 Opening of technological incubator to support the development of the IT sector
	CS-2: Swiss participation to the European Interreg. policy CS-3: Regional Policy (for Switzerland) supports innovative projects rather than specific sectors CS-4: International agreements on intellectual property related to international trade	W-1: Sectoral European Research Project in the field of micro-techniques W-2: Policy for Education, Research and Innovation encourages universities to specialise and transfer technology W-3 Tourism policy – global and local image for Switzerland and specific regions

¹ This column has been organised in such a way that the cross-sectoral initiatives are placed opposite the case study sector to which they are linked, e.g. CS-1 is placed opposite the ICT policies in the Bratislava region.

	<p>CS-5: Regional aim for Baden-Württemberg to promote the innovation base of the economy</p> <p>CS-6: Policy aims (for the Baden-Württemberg region) directed at opening up network relationships between different sectors and mobilising knowledge stocks as well as open up the region for new knowledge fields and new international connections</p> <p>CS-7: Fazit project in Baden-Württemberg initiated by the state ministry to identify new markets for innovative information and media technologies + investigate future IT and media developments of regional significance</p> <p>CS-8: Regional competence centres and innovation platforms in the Baden-Württemberg region</p> <p>CS-9: Policy attention at a regional level to support extra-regional knowledge processes</p>	<p>A-1: Regional developments of collective strategies to adapt the local economies from traditional industries to modern high-tech sectors</p> <p>A-2: Supplier-initiative Baden-Württemberg – enhancing existing networks in the vehicle cluster</p>
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The implications of the sector-specific policies for KIBS are that all the policies listed would appear to influence KIBS indirectly by creating a market for their services. However, in a few cases a market for KIBS services has been an integrated part of the policy, i.e. in T-1 and T-2 where provision of input from KIBS is an integrated part of the public-sector development projects, and also in connection with I-1, where the need for specialised KIBS services has increased as a result of this specific policy (WP6 Bratislava, p.44). In most cases the effect of regional policies on KIBS is in other words indirect creation of new demand because public regulation/programmes make it necessary for e.g. private firms to draw on the services of external knowledge providers. However, distinctions between the various sectors and the KIBS sector are not always clear-cut, e.g. in the case of the ICT sector, where several KIBS deliver specialised IT services e.g. in the area of information security services (WP5/2 Bratislava p.6), thereby overlapping extensively with the IT sector, and thus being affected directly by ICT policies. In addition, regional specialisations, such as the automotive industry in Baden-Württemberg, are likely to cause KIBS services specialised within the same sector or having strong relations to a specific sector, wherefore both sectoral and regional policies may affect them greatly. It is thus evident that the services offered by KIBS also influence the importance and effects of the sector specific policies listed above.

The strategic aims of the policies listed are summarised in Table 3.2, and it seems that each of the sectors involved tend to clutter around certain categories. The tourism policies fall under the modernisation strategy, as they concern product development and innovation within existing networks. The ICT policies indicate a strategic focus on expansion, as the policies at hand suggest additional guidelines and frameworks, which seek to assist and strengthen the existing operations of the ICT firms. The watch-making policies stay within the existing firms at an organisational level, and with a focus on modernisation strategies, e.g. through side-effects of a tourism policy of

reinventing the Swiss label.² Also the automotive policies stay on the left hand side of the table, and in one case falls under the modernisation strategy by explicitly aiming at modernising the industry, and in another case the expansion strategy is used by enhancing existing networks. The cross-sectoral policies which may entail KIBS firms as well as others are more scattered, although the vast majority is found at the bottom of the table as part of the qualitative strategies, perhaps due to the more abstract nature of these types of policies, which may open up for innovation within this line of thinking rather than strengthening specific sector characteristics already at work. All in all it can in other words be concluded that indirect market creation for KIBS services can be an impact of all four basic regional policy strategies and are not only associated with complex policies involving qualitative change.

Table 3.2. Strategic policy aims

		<i>Organisational change</i>	
		<i>Existing firms</i>	<i>New firms</i>
<i>Change in economic activity</i>	<i>Quantitative</i>	Expansion strategy <i>Typical example:</i> enhancing existing inter-firm networks <i>EURODITE cases:</i> I-1, I-2, I-3, W-1, A-2, CS-1, CS-2, CS-4, CS-9	Duplication strategy <i>Typical example:</i> strengthen the sector through new firms <i>EURODITE cases:</i> I-1, CS-2, CS-9
	<i>Qualitative</i>	Modernisation strategy <i>Typical example:</i> product development initiatives <i>EURODITE cases:</i> T-1, T-2, I-3, W-2, W-3, A-1, CS-1, CS-3, CS-5, CS-6, CS-7, CS-8	Creativity strategy <i>Typical example:</i> developing new markets and innovation platforms <i>EURODITE cases:</i> CS-3, CS-5, CS-6, CS-7, CS-8

As Table 3.1 illustrates, no policies aimed primarily at KIBS were found in the WP5 and WP6 case studies, and policy impact on KIBS merely exists through indirect and implied relations to other sector policies and broader cross-sectoral policies, whereby KIBS become almost invisible in this respect. Table 3.3 addresses the targets of change, or as stated in the template for this analysis, who and what are going to change. As some of the cross-sectoral policies naturally have broad perspectives, these tend to fall into several categories, and at the same time they are less defined, particularly in terms of target institutions, which make them more difficult to place in the table based on the information available. Therefore, several of the cross-sectoral policies have been

² This is more of a side-effect than a specified strategic aim, since the watch-making industry deliberately has avoided participation in tourism initiatives. On the other hand, the industry is aware of the effects of branding strategies that they entail, wherefore tourism initiatives have been included nonetheless.

placed in several boxes as a result of an assessment of their various targets, both when it comes to capabilities and institutions.

The picture that emerges of the targets of change is that the vertical software column and the horizontal firms/organisations level encompass the vast majority of these policies, and keeping in mind that these policies are potentially KIBS related although based in other sectors, the software dimension is a natural centre. The sector policies are centred around the firms/organisations level, and mainly the sectors of tourism, ICT and automotive are clustered at this level, whereas watch-making is scattered around several levels. Regarding target capabilities, it seems that tourism and automotive policies exist primarily as part of the orgware dimension, and ICT and watch-making as part of the software dimension, although there are several policies that reach into other levels and dimensions both vertically and horizontally. The cross-sectoral policies are centred around influencing software capabilities. It is also quite conspicuous that policies are almost completely absent at the individual level in any form. This is probably unsurprising in view of the fact that private firms are important clients for KIBS both with regard to sector-specific content and more general process consultancy, and thus again it is underlined that a wide range of regional policy would appear to influence KIBS indirectly through creating demand for their services.

Table 3.3. Targets of change

		<i>Target capabilities</i>		
		<i>Hardware</i>	<i>Software</i>	<i>Orgware</i>
<i>Target institutions</i>	<i>Individuals</i>	<i>Typical example:</i> Attraction of qualified labour <i>EURODITE cases:</i> Absent	<i>Typical example:</i> Training of employees <i>EURODITE cases:</i> W-2	<i>Typical example:</i> Creation of professional network <i>EURODITE cases:</i> Absent
	<i>Firms/organisations</i>	<i>Typical example:</i> Investment promotion <i>EURODITE cases:</i> T-1, W-1, A-1, CS-1	<i>Typical example:</i> Advisory services <i>EURODITE cases:</i> I-1, I-2, I-3, W-1, W-2, A-1, CS-1, CS-2, CS-7, CS-8	<i>Typical example:</i> Creation of network between firms <i>EURODITE cases:</i> T-1, T-2, W-1, A-1, A-2, CS-1, CS-2
	<i>System</i>	<i>Typical example:</i> Infrastructure improvement <i>EURODITE cases:</i> Absent	<i>Typical example:</i> Development of knowledge institutions <i>EURODITE cases:</i> W-3, CS-3, CS-4, CS-5, CS-6, CS-7, CS-9	<i>Typical example:</i> Creation of RDA or cluster organisation <i>EURODITE cases:</i> CS-3, CS-6

Table 3.4 addresses the policy instruments employed in the KIBS case studies policies. In general, the policies tend to fall in the bottom right hand corner of the table, in which policy rules are conditional or voluntary, and resources are information, finance or organisation. A few exceptions exist in which legal acts and agreements have been implemented at a national or

international level, whereby these policies are inescapable, and thus placed in the upper left hand corner. Policies are absent from six quadrants, which may indicate that some level of uniformity exists. In terms of the different sector policies, it seems that the tourism and automotive sectors have a specific focus on organisation as a resource, the ICT sector has a specific policy focus on information, and the watch-making sector is spread out on both information and organisation. It needs to be pointed out though that the foci that appear from this table may be highly influenced by the regional characteristics of each sector, e.g. in the case of tourism in North Jutland, where organisation has been identified as a possible solution to existing problems, wherefore it has been put on the political agenda. Likewise, it seems that the ICT sector in Bratislava may have a focus on information as a resource due to the fact that information services and legislation have been scarce – to the point of being almost non-existing - in the past (WP6 Bratislava p.21), wherefore a need to address this particular issue through political actions have emerged. The cross-sectoral policies are scattered around the table, and no obvious pattern seems to emerge. However, it seems natural that the majority of these policies are placed in the same resource columns as the sector policies, i.e. information and organisation, as these are assumed to influence each other to a great extent. By the same token, an overlap between sector policies and cross-sectoral policies at the conditional and voluntary levels is also evident.

Table 3.4. Policy instruments

		<i>Policy resources</i>			
		<i>Authority</i>	<i>Information</i>	<i>Finance</i>	<i>Organisation</i>
<i>Policy rules</i>	<i>Mandatory</i>	<i>Typical example:</i> legislation <i>EURODITE cases:</i> I-1, CS-4	<i>Typical example:</i> (primary education) <i>EURODITE cases:</i> Absent	<i>Typical example:</i> (Taxation) <i>EURODITE cases:</i> Absent	<i>Typical example:</i> (Chamber of commerce) <i>EURODITE cases:</i> Absent
	<i>Conditional</i>	<i>Typical example:</i> (Quality certification) <i>EURODITE cases:</i> Absent	<i>Typical example:</i> Specialist advice <i>EURODITE cases:</i> I-1, I-2, I-3, W-1, CS-1, CS-7, CS-8	<i>Typical example:</i> Investment strategies <i>EURODITE cases:</i> CS-3, CS-5	<i>Typical example:</i> Cluster organisation <i>EURODITE cases:</i> T-1, T-2, A-2
	<i>Voluntary</i>	<i>Typical example:</i> (Summer time) <i>EURODITE cases:</i> Absent	<i>Typical example:</i> image support <i>EURODITE cases:</i> I-3, W-3	<i>Typical example:</i> (Social security) <i>EURODITE cases:</i> Absent	<i>Typical example:</i> General network initiatives <i>EURODITE cases:</i> T-2, W-2, A-1, CS-1, CS-2, CS-6, CS-9

The primary policy instruments in the KIBS case studies thus fall under the categories of conditional and voluntary policy rules and information and organisation resources, and the

mandatory level and authority and finance are less represented. Some typical examples of the policy instruments represented are:

- Conditional access to information that support and develop the sector (e.g. national offices or regional competence centres)
- Conditional participation in networks to enhance the position of the sector (e.g. developing strategies across a sector to enhance competitiveness)
- Voluntary participation in sector networks (e.g. initiatives to support extra-regional and – sectoral knowledge processes)

As a final point of this section, the form of governance involved in each of these sector policies and the cross-sectoral policies has been assessed according to public governance and public-private governance. A tendency points towards building networks at a regional/local level, as three of the four sectors are represented in this dimension, and so are several cross-sectoral policies (4 of 9).

Table 3.5. Policy governance

		<i>Public-private governance</i>		
		<i>Governmental</i>	<i>Network</i>	<i>Market</i>
<i>Public governance</i>	<i>European</i>	<i>Typical example:</i> Competition rules <i>EURODITE cases:</i> I-2	<i>Typical example:</i> Structural Funds <i>EURODITE cases:</i> Absent	<i>Typical example:</i> Promotion <i>EURODITE cases:</i> W-1
	<i>National</i>	<i>Typical example:</i> Taxation <i>EURODITE cases:</i> I-1, CS-2, CS-4	<i>Typical example:</i> Cluster initiatives <i>EURODITE cases:</i> T-1, W-2, W-3	<i>Typical example:</i> Grants <i>EURODITE cases:</i> CS-3
	<i>Regional/local</i>	<i>Typical example:</i> Land-use planning <i>EURODITE cases:</i> CS-5	<i>Typical example:</i> Public-private partnerships <i>EURODITE cases:</i> T-2, I-3, A-2, CS-1, CS-6, CS-8, CS-9	<i>Typical example:</i> Inward investment attraction <i>EURODITE cases:</i> A-1, CS-7

In more general terms, networks are strongly represented at the public-private governance level, as is the regional/local level of public governance. To a lesser extent - although still fairly substantial - are the governmental and market dimensions, and the national level of public governance. The European level is only represented in two cases. It thus seems that the focus is on creating ongoing interaction between equal partners rather than top-down regulation.

4. KIBS- related policies and knowledge dynamics

According to the WP3 KIBS report, the primary knowledge categories of KIBS are synthetic and symbolic knowledge, and analytical knowledge only to a minor extent (WP3 KIBS p.14).

Regarding the knowledge phases: exploration, examination and exploitation, KIBS operate in all three (WP3 KIBS p.16).

As a specific characteristic of the policies of the KIBS case studies assembled in this report is that they are not directly related to KIBS but to other sectors that KIBS may be connected to and thus affected by, no direct KIBS policies have been found (see Table 3.1), and as a result, the knowledge categories and phases may be slightly different from the ones just mentioned from the WP3 report. However, the WP3 report is also based on knowledge dynamics of KIBS sub-sectors - although not the exact same as the case studies present – and therefore, it could be expected that some level of similarity is going to occur.

Table 4.1. Policy influence on knowledge types and moments

		<i>Knowledge types</i>		
		<i>Analytical</i>	<i>Synthetic</i>	<i>Symbolic</i>
<i>Know- ledge moments</i>	<i>Explo- ration</i>	<i>Typical example:</i> <i>EURODITE cases:</i> Absent	<i>Typical example:</i> research projects <i>EURODITE cases:</i> W-1, CS-7	<i>Typical example:</i> identification of new markets <i>EURODITE cases:</i> CS-2, CS-7
	<i>Exami- nation</i>	<i>Typical example:</i> <i>EURODITE cases:</i> Absent	<i>Typical example:</i> guidelines supporting future developments <i>EURODITE cases:</i> I-1, I-2, CS-4	<i>Typical example:</i> networks used to exchange knowledge <i>EURODITE cases:</i> T-1, T-2, W-2, W-3, A-2, CS-3, CS-5, CS-6, CS-9
	<i>Exploi- tation</i>	<i>Typical example:</i> <i>EURODITE cases:</i> Absent	<i>Typical example:</i> support of the sector to enhance competitive position <i>EURODITE cases:</i> I-3, CS-1, CS-8	<i>Typical example:</i> strategic aims to enhance competitiveness <i>EURODITE cases:</i> A-1, CS-1, CS-8

Table 4.1 demonstrates that it is also the case in the case study policies that the synthetic and symbolic knowledge types are strongly represented, and the analytical knowledge not at all. Likewise, all three knowledge moments are represented, although some more than others. The picture that thus emerges confirms the point made earlier on that because the cross-sectoral policies are somewhat broader in scope than the specific sector policies, they are most evident in the symbolic category, because their nature are communicative or organisational to a great extent. There is also a great extent of sector policies in the symbolic knowledge type, which also seems

natural, since the nature of KIBS relates strongly to this specific knowledge type, and thus the sector policies potentially relevant for KIBS may also fall into this category to a great extent. There is an exception though, and that is the ICT sector policies, which tend to fall into the synthetic knowledge type, as the nature of these policies is that of providing legal or technical guidance for the sector in general. Lastly, the absence of the analytical knowledge type may be due to the fact that KIBS are naturally closer related to and useful for businesses that are involved in the other types of knowledge, e.g. because specific knowledge creation in an analytical knowledge based industry often entail “*formal models, codified science and rational search processes*”, in which KIBS play a minor role (WP3 KIBS p.14). This may very well reflect a bias in the *EURODITE* sectors in terms of the type of knowledge involved, because neither the bio-tech and food/drink sectors, traditionally heavy users of analytical knowledge, are involved in the KIBS case studies.

The figures below address policy influence on knowledge, in terms of use/production, proximity/distance, and mobility/anchoring. Figure 4.1 indicates that the vast majority of the KIBS-related policies concern the use of knowledge rather than production. It is noticeable that the production of knowledge is relatively limited in the case of knowledge-intensive business services, in which knowledge is a key product. The absence of direct KIBS policies in the case studies, however, may have caused this tendency, because such policies would assumedly address the production of knowledge more directly than the sector policies, which are also the end consumers of the knowledge produced by KIBS. Figure 4.2 shows that the vast majority of policies would appear to support internal knowledge interactions in the region, and a few policies encouraging extra-regional interaction, the latter represented primarily by cross-sectoral policies, which again have a broader scope. Likewise, the sector policies seem representative of a regional perspective as well, and as such it is no surprise that these tend to focused around the internal knowledge processes of the region that they represent. The final Figure 4.3 also illustrates that knowledge transformations mainly take place within the region.

Figure 4.1. Policy influence on use and production of knowledge

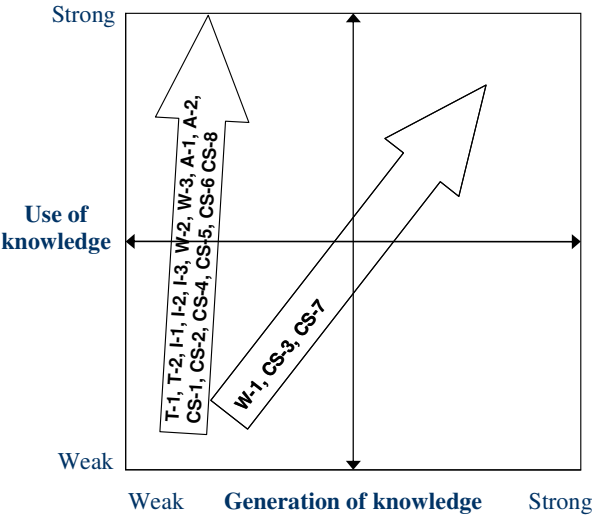


Figure 4.2. Policy influence on proximity and distance knowledge interactions

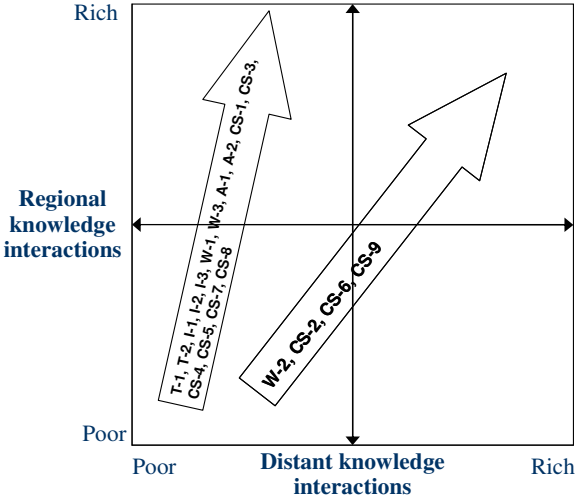
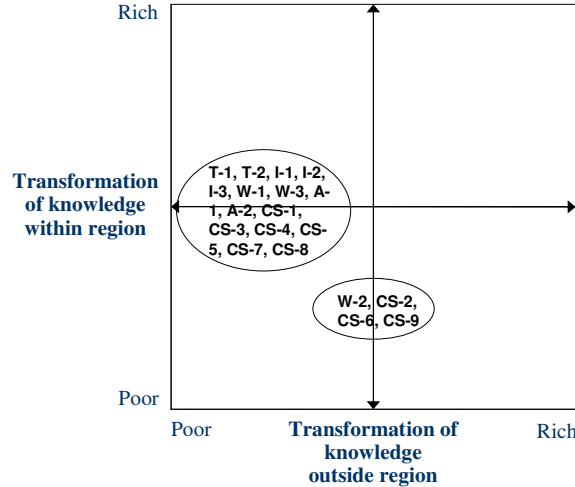


Figure 4.3. Policy influence on mobility and anchoring of knowledge



5. Policy scoping

The main objective of this section is to summarise and evaluate the findings of the various sections of this report. Some general characteristics of KDs in the sector of knowledge-intensive business services are:

- KIBS carry, produce and mediate knowledge for clients to convert into economic gain
- KIBS produce, process and sell knowledge, thereby becoming drivers of knowledge dynamics within the sectors that they work with - also evident by the fact that interaction between KIBS and KIBS' clients are part of the production process
- KIBS are most often in a dynamic relationship with the sectors they work with and is thus also dependent on their specific contexts
- KIBS are characterised by heterogeneity across a variety of services and sectors, but also by a high degree of specialisation, as they assist clients with specific tasks of knowledge production, which is then passed on to other contexts
- KIBS are characterised by a focus on synthetic and symbolic rather than analytical knowledge

The KDs of this sector are thus characterised by the fact that various contexts (that KIBS clients are involved in) play an equally central role to KDs, as do KIBS themselves, and the knowledge that has been accumulated from other contexts. Critical knowledge for the KIBS sector is thus specific contextual and organisational knowledge of the client at hand, as well as practical and theoretical knowledge that provide a basis for new knowledge to emerge.

Regarding the current KIBS policies, it seems that three main characteristics are particularly prominent:

- Sector policies play an indirect role in relation to KIBS, due to the fact that KIBS are operating within various contexts according to the clients they assist and therefore have to act according to certain sector policies that create demand for their services - but sector-specific policies only rarely have a direct KIBS dimension by e.g. explicitly requiring the involvement of private knowledge providers (column 3 in Table 3.1).
- At times, cross-sectoral policies that encompass KIBS as well as other sectors in which they operate are present in the case studies, and these are often broad in scope, and KIBS are thus affected by these policies, although in a more indirect manner, because of the general nature and broad scope of these policies (column 2 in Table 3.1).
- Lastly, the most conspicuous fact of the policies presented in the KIBS case studies is that no direct KIBS policies seem to exist, as illustrated by the empty column 1 in Table 3.1.

It therefore seems that a policy gap exists in the KIBS sector based on the *EURODITE* case studies, and that KIBS are thus exclusively affected by policies related to other sectors. This is to be expected to some extent due to the fact that KIBS are highly contextual to begin with, but nonetheless more explicitly KIBS-directed policies may be worth considering, both in their own right and as part of sector-based policies, because strengthening the presence of private knowledge providers may create a broader base for innovation and growth, also in sectors that are not currently dominant but still may be of importance from the perspective of developing a regional knowledge economy.

The findings in this report contest the *EURODITE* hypotheses in some ways and verify them in others (see appendix). The main confrontations are related to the fact that KIBS are not present in the case study policies, and the nature of the knowledge processes in which KIBS are involved. For example, the growing role of private KIBS is not evident in these policies, as KIBS are completely absent from these. Also, symbolic knowledge is a substantial part of the KIBS related policies, and thereby symbolic knowledge is a quite evident form of knowledge in these policies, which opposes the hypothesis put forward that limited attention is accorded to this particular form of knowledge. On the other hand, some hypotheses are verified by the KIBS case studies, e.g. the increasing importance of knowledge-intensive policy instruments, which is confirmed by a focus on voluntary organisation as an instrument, and the increase in multi-level policy designs and implementations, which is verified by the large number of cross-sectoral policies involved in the KIBS case studies.

Appendix: KIBS-related policies and WP8 hypotheses

Hypothesis	Implications
Limited policy attention accorded to symbolic forms of knowledge	In this case, focus is on synthetic and symbolic forms of knowledge, and a majority of policies falls within the symbolic knowledge dimension, which contradicts this hypothesis.
Limited policy attention accorded to the consumption side of economic knowledge processes	
Limited policy attention accorded to supporting combinatorial knowledge processes	As a great number of cross-sectoral policies exist, which include KIBS, combinatorial knowledge processes are somewhat implied in these policies, which suggests potential for more dynamic development processes.
Limited policy attention accorded to supporting extra-regional knowledge processes	Some tendencies suggest knowledge sharing across regions and sectors, e.g. W-2, W-3
An increasing importance of knowledge-intensive policy instruments	Focus is on voluntary organisation as a policy instrument, and as such falls into the knowledge-intensive category rather than the regulatory ones, which confirms this hypothesis.
The increasingly multi-level nature of policy-design and implementation	This is confirmed by the fact that cross-sectoral policies are present in the KIBS case studies, and the fact that several policies are broadly defined to be implemented at several levels
The growing role of private KIBS (and freelancing academics) in policy design and implementation	KIBS are conspicuously absent from the policies
The self-proclaimed gender-neutrality of most policies	
Evidence-based policy-making is of increasing importance	
Growing importance of regulatory pressure as creator of knowledge-intensive demand	Mandatory policy rules are almost completely absent from these policies, and so is authority as a resource, indicating that regulation is not the preferred policy instrument in these cases.